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Appln. No.: 10/643,097

Reply to Office action of January 17, 2007

LISTING OF CLAIMS:

- 1(Currently Amended). A method of fabricating PTFE material comprising:
preparing a mixture of PTFE resin powder and a susceptor material;
feeding the mixture into a compaction zone to at least partially compact and shape the mixture; and
providing a continuous flow of the mixture from the compaction zone downstream to a separate heating zone and heating and sintering the mixture within the heating zone by exciting the susceptor material by application of wave energy and drawing a vacuum on the mixture within the heating zone while sintering the mixture to extract air from the mixture.
- 2(Cancelled).
- 3(Currently Amended). The method of claim 2-1 wherein the heating zone has an initial stage for preheating and finishing compaction of the mixture prior to sintering the mixture.
- 4(Currently Amended). The method of claim 2-1 including passing the sintered mixture through a cooling zone following the heating zone.
- 5(Original). The method of claim 1 including cutting the PTFE material while the mixture is at a temperature below a sintering temperature within the heating zone but above ambient temperature.
- 6(Original). The method of claim 1 wherein the mixture is compacted into a generally tubular form.
- 7(Original). The method of claim 1 wherein the mixture is heated by microwave energy.
- 8(Currently Amended). A method of fabricating a PTFE material, comprising:
preparing a mixture of PTFE resin powder and a susceptor material;
compacting the mixture; and
sintering the mixture by exciting the susceptor material with microwave energy and drawing a vacuum on the mixture during the sintering step to extract air from the mixture.
- 9(Cancelled).